Exide Landfull Cleanup Options
May 23, 2013

I. **Option:** Close as hazardous waste landfill with waste in place as-is
Process: State-issued permit or order

Pros:

1. RCRA permit process will ensure public participation
2. Will ensure long-term maintenance and monitoring
3. Landfill is equipped with liner, leachate collection, and groundwater monitoring wells with additional wells planned
4. Will not result in dust generation activities
5. Can be completed in short time-frame
6. Least expensive option
7. Cost estimate – $5.0 million

Cons:

1. Waste exceeds UTS and toxicity characteristic limits and may require a waiver or variance from EPA to allow it to stay as is in the landfill
2. Landfill doesn't have a double-liner or leak detection system
3. City does not want the stigma of having a "hazardous waste landfill"
4. Requires commitment and financial assurance for long-term (30+ years) monitoring

II. **Option:** Remove all waste from the landfill
Process: State or EPA Enforcement Order

Pros:

1. Removes all potential for releases to groundwater and surface water from the landfill
2. Will meet city's request for no haz waste landfill
3. Could use trucks or possibly rail spur for removal
4. No long-term monitoring needed

Cons:

1. Removal of 400,000 tons of material would take approximately 25 truck loads for 3+ years, resulting in excessive truck traffic through the city and potential dust exposure
2. Potential landfill capacity issue – who can take it?
3. Very costly
4. Cost estimate - $45.5 to $70.7 million

III. **Option:** Remove hazardous waste, dispose off-site, close as non-hazardous waste landfill
Process: State or EPA Enforcement Order

Pros:

1. Will remove hazardous waste and meet city's request for no haz waste landfill
2. Will reduce potential for releases to groundwater and surface water
3. Reduced duration of monitoring after closure
4. Not as costly as removal of all waste
5. Less waste to travel over roads or rail

Cons:

1. Difficult to ensure all haz waste is removed
2. Will result in dust generation from excavation and transportation requiring additional dust suppression measures to be put in place
3. Will leave some hazardous constituents in place requiring groundwater monitoring
4. Cost estimate - - $6.1 to $6.7 million

IV. **Option:** Re-treat and replace material, close as a non-hazardous waste landfill
Process: State Order (already in place)

Pros:

1. Will meet city's request for no haz waste landfill
2. Will reduce potential for releases to groundwater and surface water
3. Reduced duration of monitoring after closure
4. Not as costly as removal of all waste
5. Equipment already mobilized and in place for retreatment

Cons:

1. Need extensive treatability study to ensure successful treatment
2. Will leave some hazardous constituents in place requiring groundwater monitoring
3. Will generate during dust during the excavation and retreatment process requiring additional dust suppression measures
4. Cost estimate - $8.1 million

V. **Options:** Cleanup under CERCLA as Superfund site
Process: State or EPA CERCLA/Superfund

Pros:

1. EPA/State control of cleanup
2. If ranked, assures access to cleanup funds
3. Guarantees public opportunity for participation

Cons:

1. Extensive ranking and evaluation process
2. Compete for funding with other sites

3. Long term cleanup
4. Stigma of “superfund site” in the city
5. Costly